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TI HYDROGEN STORAGE ALLOY  
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AB PURPOSE: To produce a hydrogen storage alloy remarkably improved in the amt. of hydrogen to be occluded, plateau properties, response characteristics to the change of hydrogen pressure or the like, in a hydrogen storage alloy constituted of Ti, V and Ni, by prescribing each content of Ti, V and Ni.  
CONSTITUTION: In a hydrogen storage alloy expressed by the general formula:  $Ti<SB>x</SB>V<SB>y</SB>Ni<SB>z</SB>$ , the compsn. (x) of Ti, the compsn. (y) of V and the compsn. (z) of Ni are limited to the range surrounded by the A point in th figure:  $Ti<SB>5</SB>V<SB>90</SB>Ni<SB>5</SB>$ , the B point:  $Ti<SB>5</SB>V<SB>75</SB>Ni<SB>20</SB>$ , the C point:  $Ti<SB>30</SB>V<SB>50</SB>Ni<SB>30</SB>$  and the D point:  $Ti<SB>30</SB>V<SB>65</SB>Ni<SB>5</SB>$  (namely, by atom,  $5\% \leq x \leq 30\%$ ,  $50\% \leq y \leq 90\%$  and  $5\% \leq z \leq 20\%$ ). Moreover, the range surrounded by the E point:  $Ti<SB>25</SB>V<SB>65</SB>Ni<SB>10</SB>$ , the F point:  $Ti<SB>15</SB>V<SB>75</SB>Ni<SB>10</SB>$ , the G point:  $Ti<SB>15</SB>V<SB>67.5</SB>Ni<SB>17.5</SB>$  and the H point:  $Ti<SB>25</SB>V<SB>57.5</SB>Ni<SB>17.5</SB>$  (namely,  $15\% \leq x \leq 25\%$ ,  $57.5\% \leq y \leq 75\%$  and  $10\% \leq z \leq 17.5\%$ ) is preferably regulated. In this way, the hydrogen storage alloy used for the hydrogen occlusion electrode of an alkali secondary battery or the like can be obtd.  
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